

PATENT
USSN 09/990,080
Docket 018/258c

AMENDMENTS TO THE SPECIFICATION

Please correct the paragraphs on lines 1-7 of page 2 of the substitute specification (paragraphs [0011] and [0012] of the application as published) as follows:

The invention also provides a method of reducing telomerase activity in a cell by introducing the polynucleotide described *supra* (i.e., having a deletion of ~~deletion of~~ amino acid residues 192-450, 560-565, 637-660, 638-660, 748-766, 748-764, or 1055-1071) into a cell under conditions in which it is expressed.

In a related embodiment, the hTERT polypeptide has one or more mutations other than, or In addition to, a deletion of at least 25 residues in the regions corresponding to residues 192-323, 200-323, 192-271, 200-271, 222-240, 415-450, 192-323 and 415-450, or 192-271 and 415-450 of hTERT. ~~In an other embodiment, the invention provides~~ **8.8.8 METHOD**

Please insert the following paragraphs following line 2, page 7 of the substitute specification (after paragraph [0036] of the application as published):

U.S. Patent No. 6,166,178 refers to methods, reagents, vectors, and cells useful for expression of hTERT polypeptides and nucleic acids. In one embodiment, expression of the hTERT protein, or fragment thereof, comprises inserting the coding sequence into an appropriate expression vector (i.e., a vector that contains the necessary elements for the transcription and translation of the inserted coding sequence required for the expression system employed). For mammalian host cells, viral-based and nonviral expression systems are provided. Nonviral vectors and systems include plasmids and episomal vectors. Useful viral vectors include vectors based on retroviruses, adenoviruses, adeno-associated viruses, herpes viruses, vectors based on SV40, papilloma virus, HBP Epstein Barr virus, vaccinia virus vectors and Semliki Forest virus (SFV).

For the production of anti-hTERT antibodies, hosts such as goats, sheep, cows, guinea pigs, rabbits, rats, or mice, may be immunized by injection with hTERT protein or any portion, fragment, or oligopeptide thereof that retains immunogenic properties. In selecting hTERT polypeptides for antibody induction, one need not retain biological activity; however, the protein fragment, or oligopeptide must be immunogenic. Immunogenicity can be determined by injecting a polypeptide and adjuvant into an animal (e.g., a rabbit) and assaying for the appearance of antibodies directed against the injected polypeptide (Harlow and Lane, *Antibodies: A Laboratory Manual*, Cold Spring Harbor Laboratory, New York, 1988).

Peptides used to induce specific antibodies typically have an amino acid sequence consisting of at least five amino acids, preferably at least 8 amino acids, more preferably at least 10 amino acids. Usually they will mimic or have substantial sequence identity to all or a contiguous portion of the amino acid sequence of the protein of SEQ ID NO:2. Depending on the host species, various adjuvants may

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be used to increase immunological response. Immunogenic peptides or polypeptides having an hTERT sequence can be used to elicit an anti-hTERT immune response in a patient (i.e., act as a vaccine). An immune response can also be raised by delivery of plasmid vectors encoding the polypeptide of interest. Further details on techniques for formulation and administration may be found in the latest edition of *Remington's Pharmaceutical Sciences*, Maack Publishing Co., Easton PA.